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(54) **A CASE FOR A BODY TEMPERATURE-MEASURING THERMOMETER HAVING A REGION WITH A MAGNIFYING GLASS EFFECT FOR READING THE GRADUATED SCALE OF THE THERMOMETER**

(57) A case (1) for a thermometer (5) for measuring the body temperature of a sick individual comprising a compartment (2) extending along a major longitudinal axis (X-X) with one open end (4), for receiving the thermometer (5) into the compartment, said compartment (2) having at least one transparent zone (6) with a magnifying glass effect for reading of the graduated scale (7) of the thermometer (5) when the latter is within the compartment (2) of the case, said transparent zone (6) forming

part of a wall (8) of the compartment of the case, said compartment (2) further comprising a wall (9) whose outer surface forms a base surface of the case, characterized in that said transparent zone (6) with the magnifying glass effect forms a surface (8) that intersects said base surface (9) of the case, and forms an angle (α) therewith, whose vertex (V) is placed on the side of the case (1) from which the graduated scale of the thermometer is read through said transparent zone.

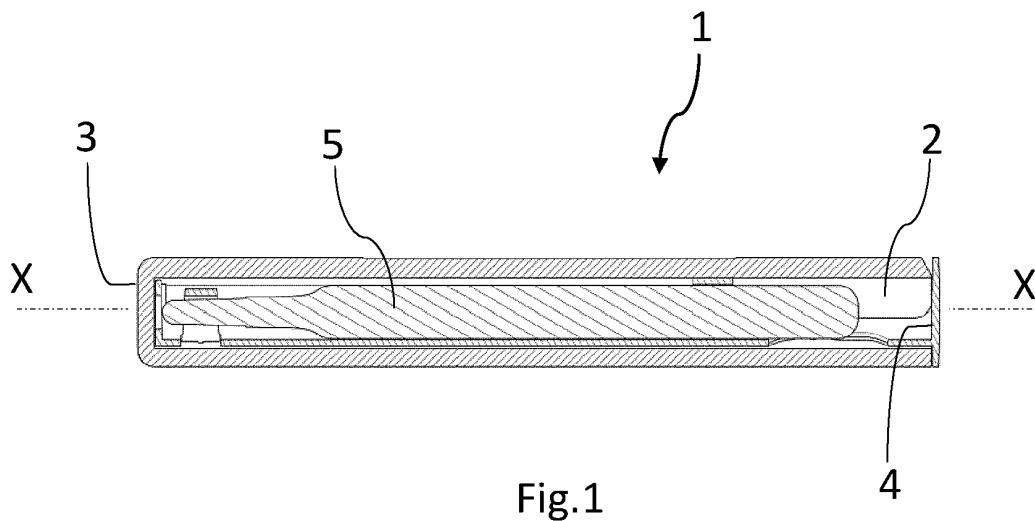


Fig.1

Description

[0001] The present invention relates to a case for a thermometer for measuring the temperature of a sick individual, especially for domestic use, but without excluding professional use by physicians or nurses.

[0002] The case is of the type that comprises a compartment extending along a major longitudinal axis, with one open end equipped with a removable opening/closing member, through which the thermometer is introduced into the compartment.

[0003] One longitudinally delimiting wall of the compartment is known to be possibly formed with at least one transparent zone providing a magnifying glass effect, to facilitate reading of the graduated scale of the thermometer when the latter is stored in the compartment of the case.

[0004] According to the prior art, when the case has a compartment with a rectangular cross section, it has a wall whose outer surface forms a base surface of the case for the latter to lie on a table or a support surface.

[0005] Since this base wall is normally opposite and parallel to the wall in which the section or zone with the magnifying glass effect is formed, such arrangement has been found, during use, to hinder reading of the graduated scale of the thermometer, when the latter is within the case.

[0006] That is, with such arrangement the user is required to look at the transparent zone from above when the case lies on a support surface, such as a table beside the bed, unless he/she picks it up and brings it close to his/her face.

[0007] This constitutes a drawback especially if the user is sick and bedridden.

[0008] Therefore, the object of the present invention is to provide a case structure for a body temperature thermometer, equipped with transparent magnifying glass zone, affording facilitated reading of the graduated scale of the thermometer, when it is within the case and the latter lies on a support surface, without requiring it to be held on one hand to look for an appropriate position for reading.

[0009] This and other objects, as more clearly explained hereinbelow, are fulfilled by a case for a thermometer for measuring the body temperature of a sick individual comprising a compartment extending along a major longitudinal axis with one open end, for receiving the thermometer into the compartment, said compartment having at least one transparent zone with a magnifying glass effect for reading of the graduated scale of the thermometer when the latter is stored in the compartment of the case, said transparent zone forming part of a wall of the compartment of the case, said compartment further comprising a wall whose outer surface forms a base surface of the case, characterized in that said transparent zone, with the magnifying glass effect is formed on a surface that is contiguous to said base surface of the case, and forms an angle therewith, whose vertex is

placed on the side of the case from which the graduated scale of the thermometer is read through said transparent zone.

[0010] The invention will be now described in greater detail with reference to one embodiment thereof, given by way of illustration and without limitation, and depicted in the annexed drawings, in which:

- Figure 1 shows a cross-sectional view of the case according to a first embodiment of the invention, with the thermometer therein;
- Figure 2 shows a perspective view of the case of Figure 1, without the thermometer therein;
- Figure 3 shows a cross-sectional view of the case according to a second embodiment of the invention, with the thermometer therein;
- Figure 4 shows a perspective view of the case of Figure 3, without the thermometer therein;
- Figure 5 shows a perspective schematic view of the case of Figure 1, as taken from its open end with the thermometer therein, the case lying on a support surface.

[0011] Referring to the aforementioned figures, numerical 1 generally designates the case of the invention. It comprises a compartment 2, extending along a major longitudinal axis X-X.

[0012] The compartment 2 has one open end 4, which is nevertheless equipped with a closure member, e.g. in the form of a cap or lid, not shown because it is known in the art, which may be used to close the case, once the body temperature thermometer 5 has been introduced therein.

[0013] According to a first embodiment, the compartment 2 comprises a closed end 3 opposite to the open end 4 along the longitudinal axis X-X.

[0014] According to a second embodiment, alternative to the first embodiment, the compartment 2 comprises an additional open end 3' opposite to the open end 4 along the longitudinal axis X-X.

[0015] The aforementioned compartment 2 has at least one zone 6 that is transparent and provides a magnifying glass effect, for facilitated reading of the graduated scale 7 of the thermometer 5, when the latter is within the compartment of the case.

[0016] The transparent zone 6 forms a part of a wall 8 of the compartment of the case 1, whereas another wall 9 of the compartment 2 forms with its outer surface a base surface of the case 1 for the latter to be laid, for instance, on a support surface, generally referenced R, which may be for example a table beside a bed.

[0017] In order to make sure that the graduated scale 7 of the thermometer is placed in front of the transparent zone 6, said compartment 2 of the case has a base surface 10 therein, on which the thermometer or a case thereof may be laid, which is opposite to the surface 8 of said transparent zone.

[0018] According to the invention, the wall 8, or at least

the surface in which the transparent zone 6 with the magnifying glass effect is formed, and the base wall 9 of the case, form an angle, referenced α , whose vertex V is located on the side from which the graduated scale of the thermometer is read through the transparent zone 6.

[0019] With the aforementioned arrangement, the provision of the angle α facilitates reading of the graduated scale of the thermometer, when the case lies on the support surface R, even by a patient that lies in a bed, obviously as long as said transparent zone 7 faces him/her.

[0020] In particular, the angle α is an angle that ranges from 30 to 90° with respect to the plane of the wall 9 and, preferably, from 50° to 60°.

[0021] The materials that form the case 1 may be of various natures, including plastic materials, as long as they are compatible with the function to be accomplished.

of the case with said transparent area (6) with the magnifying glass effect, also forms a surface oriented at an angle (α) with respect to said base surface of the case.

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6. A case as claimed in any of claims 1 to 5, **characterized in that** the compartment (2) comprises a closed end (3) opposite to the open end (4) along the longitudinal axis (X-X).

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7. A case as claimed in any of claims 1 to 5, **characterized in that** the compartment (2) comprises an additional open end (3') opposite to the open end (4) along the longitudinal axis (X-X).

Claims

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1. A case (1) for a thermometer (5) for measuring the body temperature of a sick individual, comprising a compartment (2) extending along a major longitudinal axis (X-X) with one open end (4), for receiving the thermometer (5) into the compartment (2), said compartment (2) having at least one transparent zone (6) with a magnifying glass effect for reading of the graduated scale (7) of the thermometer (5) when the latter is within the compartment (2) of the case, said transparent zone (6) forming part of a wall (8) of the compartment of the case, said compartment (2) further comprising a wall (9) whose outer surface forms a base surface of the case, **characterized in that** said transparent zone (6) with the magnifying glass effect forms a surface (8) that intersects said base surface (9) of the case, and forms an angle (α) therewith, whose vertex (V) is placed on the side of the case (1) from which the graduated scale of the thermometer is read through said transparent zone.

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2. A case as claimed in claim 1, **characterized in that** said angle (α) ranges from 30 to 90 with respect to said base surface (9) of the case.

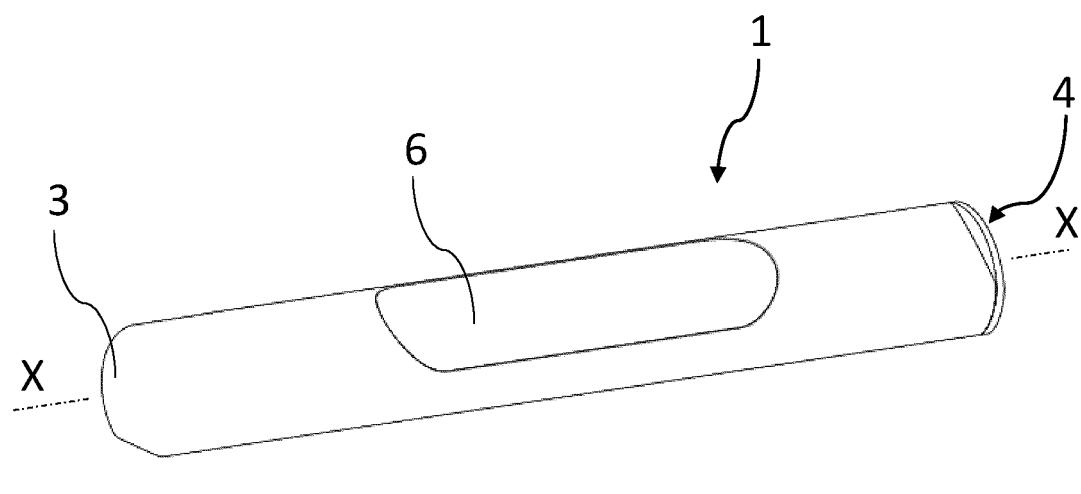
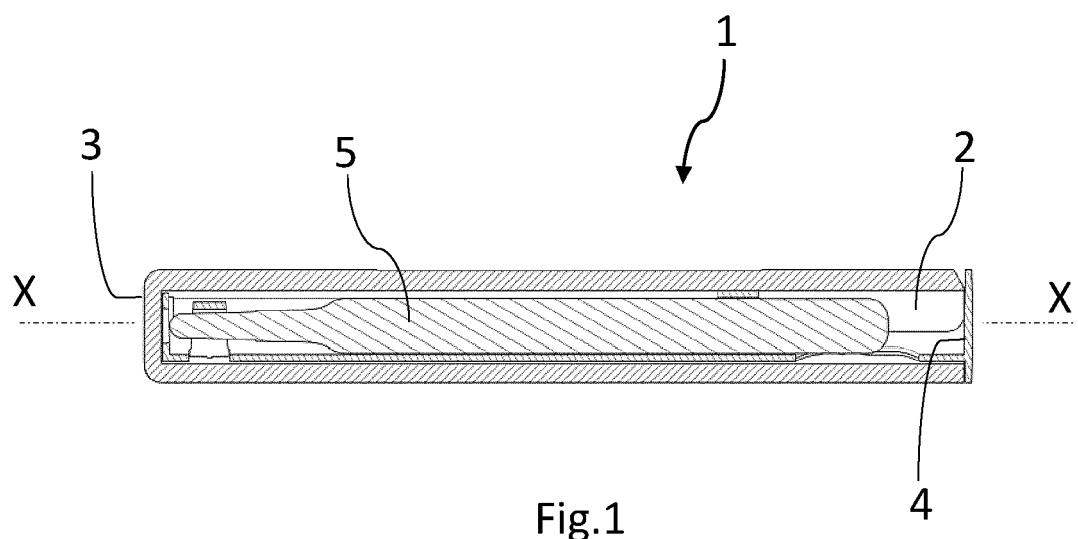
3. A case as claimed in claims 1 and 2, **characterized in that** said angle (α) ranges from 50° to 60° with respect to said base surface (9) of the case.

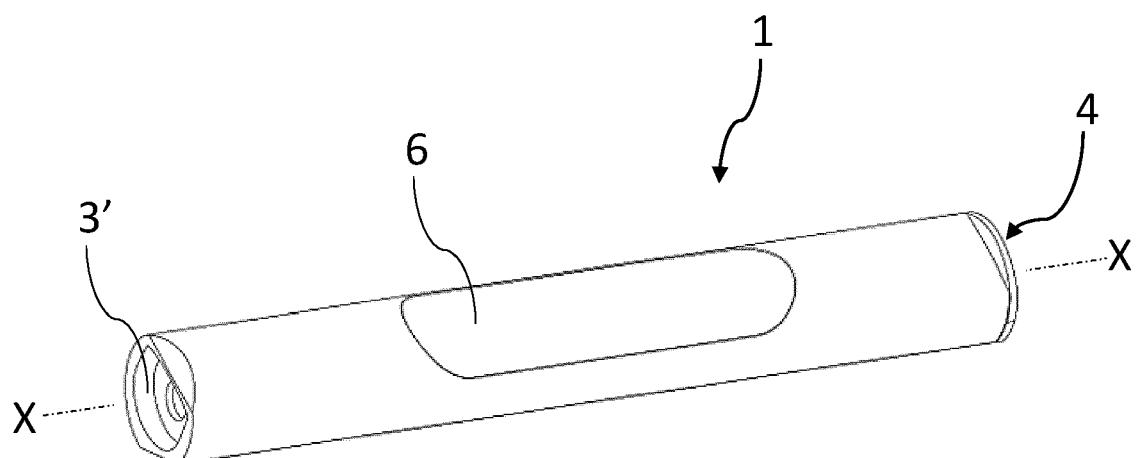
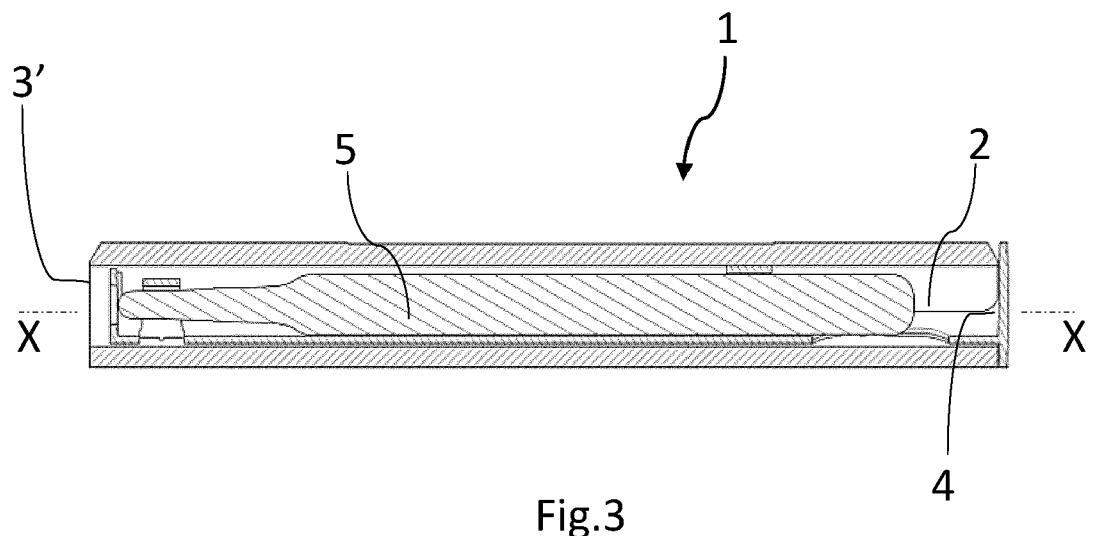
4. A case as claimed in any of claims 1 to 3, **characterized in that** said compartment (2) of the case has a base surface (10) therein, on which the thermometer or a case thereof may be laid, which is opposite to the surface of said transparent zone (6) with the magnifying glass effect.

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5. A case as claimed in any of claims 1 to 4, **characterized in that** said wall (8) of the compartment (2)





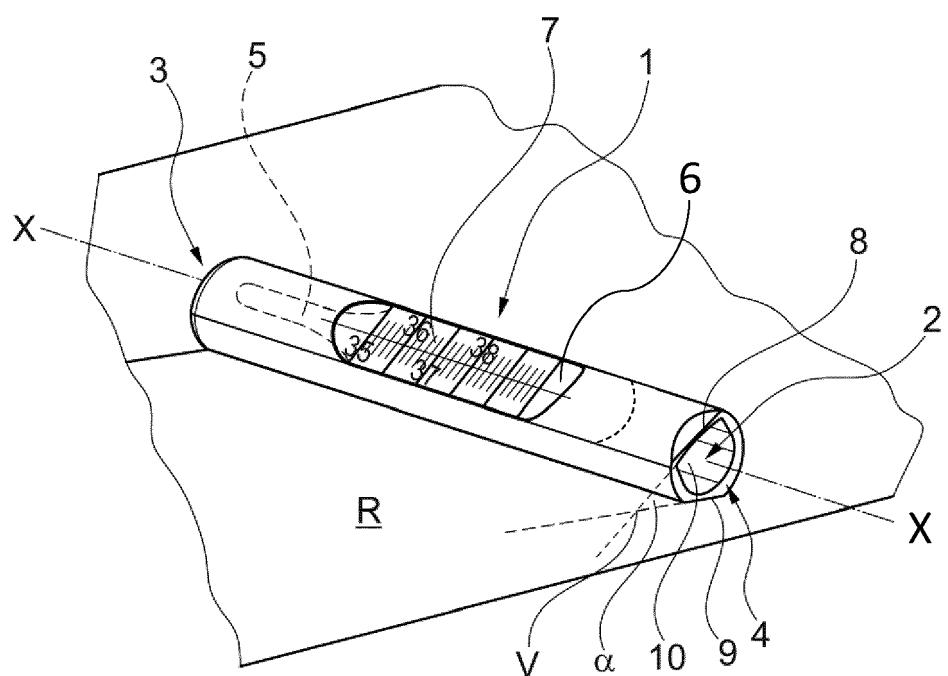


Fig.5



EUROPEAN SEARCH REPORT

Application Number

EP 20 16 2045

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
10 A	CN 106 595 882 A (WANG WEIJIAN) 26 April 2017 (2017-04-26) * the whole document * -----	1-7	INV. G01K1/06 G01K1/08 G01K5/02 G01K5/22 G01K13/00
15 A	US 3 052 158 A (WILLIAM SONNI ARTHUR) 4 September 1962 (1962-09-04) * column 1, lines 9-10,13-32; figures 1-5 * * column 1, line 61 - column 2, line 18 * * column 2, lines 51-65 * -----	1-7	
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50 1	The present search report has been drawn up for all claims		
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Place of search		Date of completion of the search	Examiner
The Hague		24 July 2020	Phleps, Stefanie
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-07-2020

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15	CN 106595882 A	26-04-2017	NONE	
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